

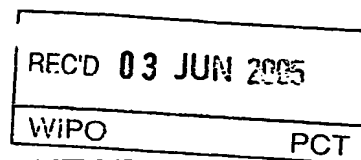
# PATENT COOPERATION TREATY


## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference JL/ARB/21554		<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/GB2004/001777		International filing date (day/month/year) 26.04.2004	Priority date (day/month/year) 30.04.2003	
International Patent Classification (IPC) or national classification and IPC B41J29/02				
Applicant ROCHFORD, Craig et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 4 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  28.02.2005		Date of completion of this report  01.06.2005		
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Urbaniec, T  Telephone No. +49 89 2399-6079		



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/GB2004/001777

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

**Description, Pages**

1-10 as originally filed

**Claims, Numbers**

1-32 received on 02.03.2005 with letter of 28.02.2005

**Drawings, Sheets**

1/7-7/7 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-32
	No: Claims	
Inventive step (IS)	Yes: Claims	1-10
	No: Claims	11-32
Industrial applicability (IA)	Yes: Claims	1-32
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: US-A-6231148

D2: US-A-2001/0024354

2. The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows:

A package (i.e. the casing of a single-time use camera) comprising a container manufactured from a disposable and recyclable material and at least one sheet of paper stored within the interior of the container, characterised in that the container comprises mounting means for allowing a releasable attachment to the container of one or more electrical components for printing onto a sheet of paper stored within the container interior and in that a portion of the container is movable relative to the remainder of the container so as to open an access aperture providing access to the container interior so as to allow for said attachment of a component by use of said mounting means. See col. 3, line 56 to col. 4 line 16 and figures 22-23.

The subject-matter of claim 1 differs from that disclosure in that the **package is made of biodegradable material**.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

3. The problem to be solved by the present invention may be regarded as facilitating the environmentally friendly refill of printing consumables.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The document D1 suggests a recyclable and refillable package which has to be collected and returned to the manufacturer for reconditioning (see col. 16, lines 17-31). Providing a package with a biodegradable container prevents the end user from his involvement

in the burdensome package return procedure. Instead, the emptied package can be disposed of in any location without a harm to the environment. This results in savings in the end user's time and transportation costs. None of the documents cited in the search report addresses this problem.

Claims 2-10 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 11 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 11, and discloses "a printer body made from a recyclable material". See in particular the claims 6 and 15 of the document D1.

The subject-matter of claim 11 differs from this disclosure in that the material is biodegradable.

The problem to be solved by the subject-matter of claim 11 may be therefore regarded as facilitating the recycling of valuable parts other than the chassis. See the current application on page 3 of the description, lines 11-17.

However, the solution proposed in claim 11 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the reason that the document D2 explicitly addresses the same problem of recycling electronic appliances (see the paragraph [0040]) and suggests a solution of providing a chassis (i.e. a structural member) made of a biodegradable material.

Dependent claims 12-32 only concern constructional details of certain embodiments of the printer and appear not to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see the documents cited above and the corresponding passages cited in the search report.

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(SEPARATE SHEET)**

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5. Although claims 1 and 11 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the scope of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

**CLAIMS:**

1. A package of paper comprising a container manufactured from a disposable and biodegradable material; and at least one sheet of paper stored within the interior of the container; characterised in that the container comprises mounting means for allowing a releasable attachment to the container of one or more electrical components for printing onto a sheet of paper stored within the container interior; and in that a portion of the container is movable relative to the remainder of the container so as to open an access aperture providing access to the container interior so as to allow for said attachment of a component by use of said mounting means.
2. A package of paper as claimed in Claim 1, wherein the container is manufactured from pulp fibre.
3. A package of paper as claimed in Claim 1 or 2, wherein the container comprises a honeycomb construction.
4. A package of paper as claimed in any of the preceding claims, wherein an outer surface of the container is covered in a waterproofing material.
5. A package of paper as claimed in Claim 4, wherein said waterproofing material completely encapsulates the container.
6. A package of paper as claimed in Claim 5, wherein a line of perforations is provided in said waterproofing material adjacent an aperture in the container, said waterproofing material covering said aperture and said line of weakness extending around said aperture so as to provide said portion of the container movable relative to the remainder of the container.
7. A package of paper as claimed in any of the preceding claims, wherein said mounting means comprises a resilient snap lock clip.

8. A package of paper as claimed in any of the preceding claims, wherein said mounting means comprises means for mounting a motor to the container.
9. A package of paper as claimed in Claim 8, wherein said means for mounting a motor comprises a rail slider upon which a motor may be located and slid into a use position.
10. A package of paper as claimed in any of the preceding claims, wherein an electrical connector is mounted on the container so as to receive and electrically connect with a further electrical connector mounted on a motor housing located in a use position relative to the container.
11. A printer chassis manufactured from a disposable and biodegradable material.
12. A printer chassis as claimed in Claim 11, wherein the chassis is manufactured from pulp fibre.
13. A printer chassis as claimed in Claim 11 or 12, wherein the chassis comprises a honeycomb construction.
14. A printer chassis as claimed in any of the preceding claims, wherein an outer surface of the chassis is covered in a waterproofing material.
15. A printer chassis as claimed in Claim 14, wherein said waterproofing material completely encapsulates the chassis.
16. A printer chassis as claimed in Claim 15, wherein a line of perforations is provided in said waterproofing material adjacent an aperture in the chassis, a portion of said waterproofing material covering said aperture and said line of weakness extending around said aperture so as to allow ready removal of said portion of material.
17. A printer chassis as claimed in any of Claims 14 to 16, wherein said waterproofing material is bonded to the chassis.



18. A printer chassis as claimed in any of Claims 14 to 17, wherein said waterproofing material is wax paper.
19. A printer chassis as claimed in any of the preceding claims, further comprising means for mounting on the chassis a motor for driving relative movement between a printer head and paper to be printed.
20. A printer chassis as claimed in Claim 19, wherein said means for mounting a motor comprises means for releasably securing a motor to the chassis.
21. A printer chassis as claimed in Claim 20, wherein said releaseable securing means comprises a resilient snap lock clip.
22. A printer chassis as claimed in any of Claims 19 to 21, wherein said means for mounting a motor comprises a rail slider upon which, in use, a motor may be located and slid into a use position.
23. A printer chassis as claimed in any of the preceding claims, wherein an electrical connector is mounted on the chassis so as to receive and electrically connect with a further electrical connector mounted on a motor housing located in a use position relative to the chassis, the printer further comprising a printer head electrically connected to said chassis mounted electrical connector.
24. A printer chassis as claimed in any of the preceding claims, further comprising means for mounting on the chassis a printer head.
25. A printer chassis as claimed in Claim 24, wherein said means for mounting a printer head comprises means for releasably securing a printer head to the chassis.
26. A printer chassis as claimed in Claim 25, wherein said releaseable securing means comprises a resilient snap lock clip.
27. A printer chassis as claimed in any of the preceding claims, further comprising a printer head.

28. A printer chassis as claimed in any of the preceding claims, further comprising means for mounting on the chassis a scanner head for scanning documents.
29. A printer assembly comprising a chassis as claimed in any of the preceding claims, further comprising at least one sheet of paper to be printed, said paper being located within the chassis.
30. A printer assembly as claimed in Claim 29, comprising between 50 and 150 sheets of paper.
31. A printer comprising a chassis as claimed in any of Claims 11 to 28.
32. A printer comprising a printer assembly as claimed in Claim 29 or 30.